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Pattern Research Project

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2018

## Pattern Research Project: An Investigation of The Pattern And Printing Process - Inlay

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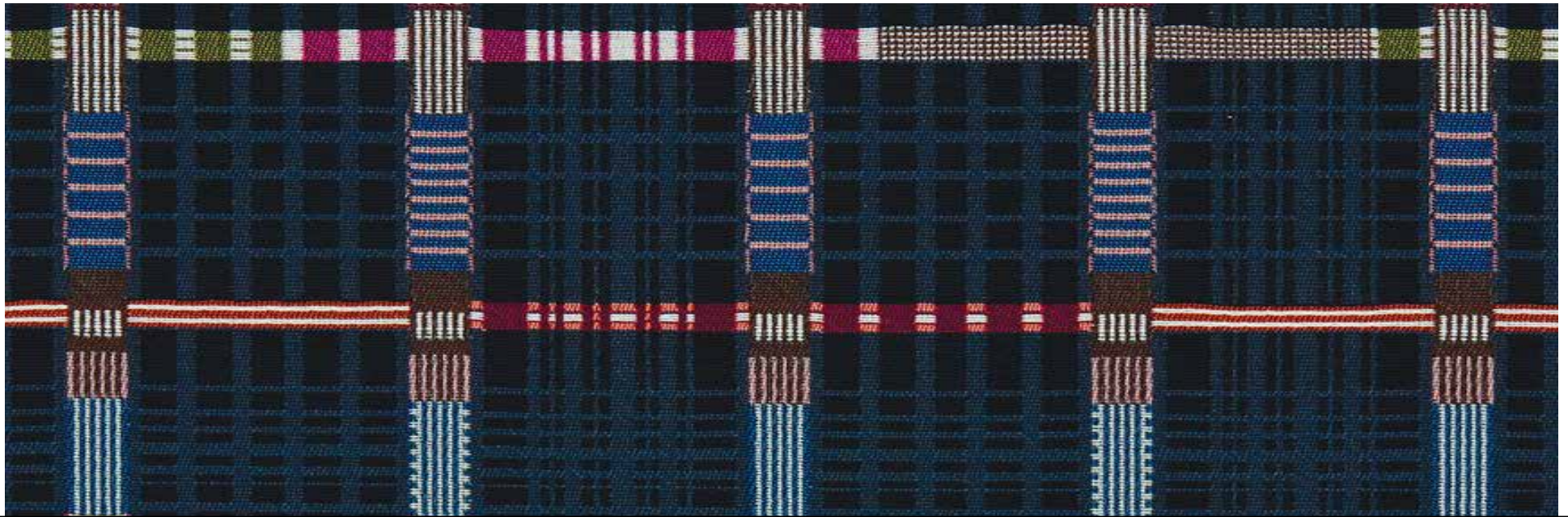
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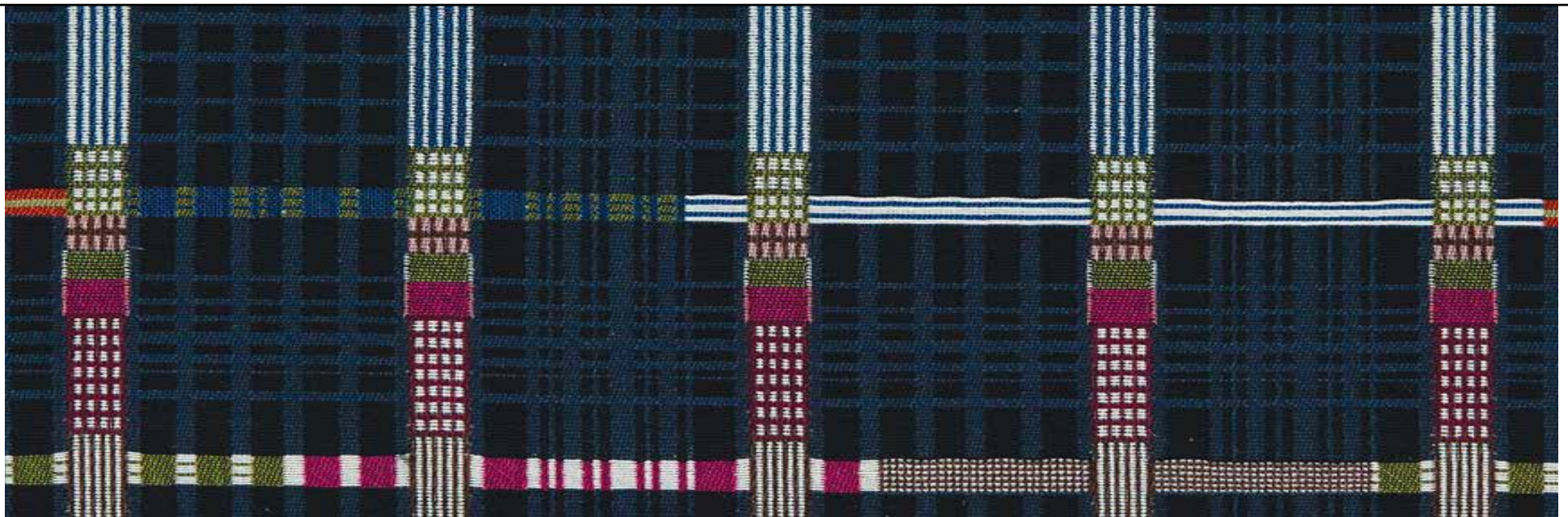
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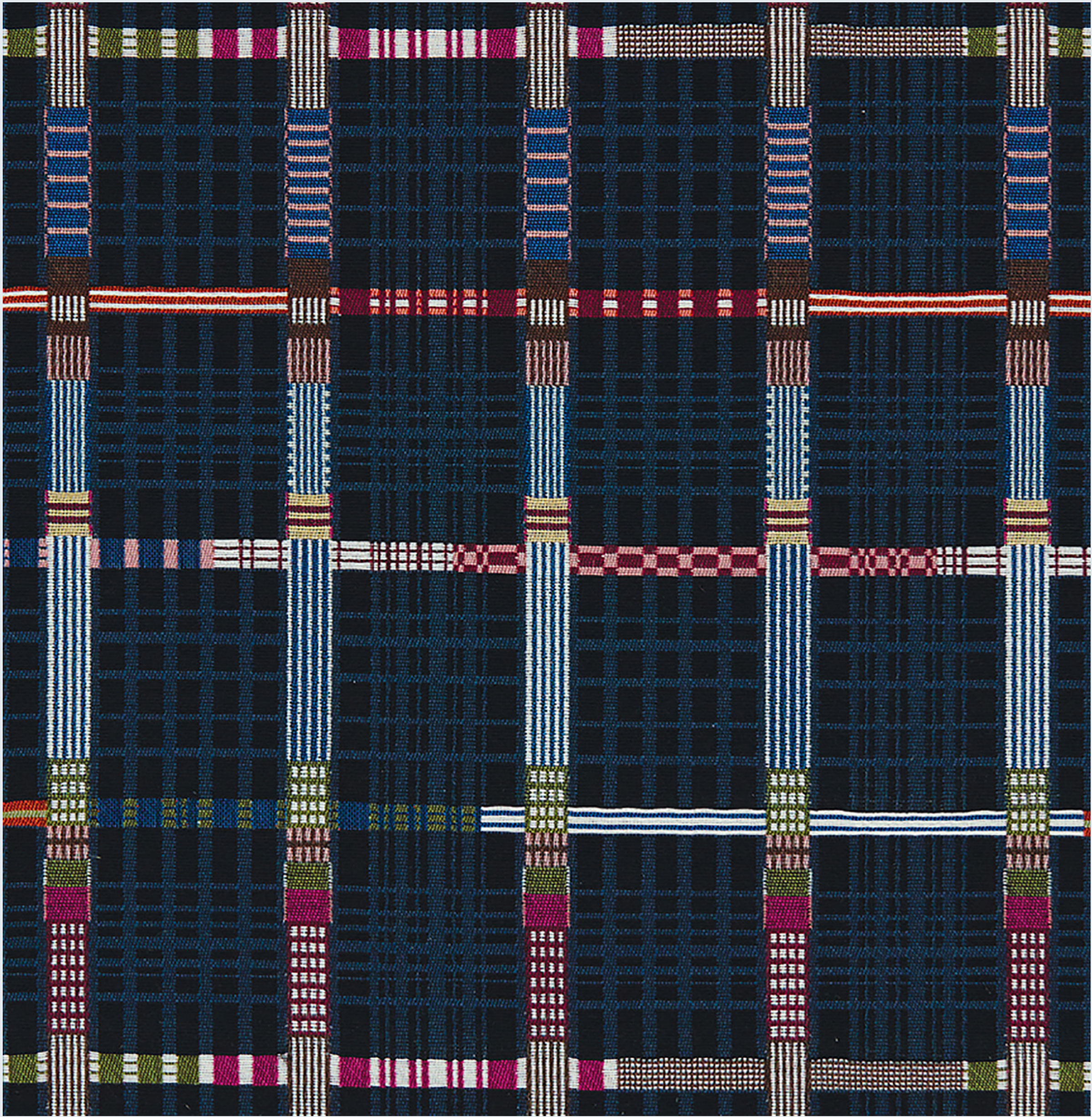
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Inlay







(2016). Inlay by Hella Jongerius. *Maharam*. Retrieved from <https://www.maharam.com/products/inlay-by-hella-jongerius/colors/004-indigo>

## CONTEMPORARY PATTERN: INLAY by HELLA JONGERIUS

### MATERIALITY + DESIGN

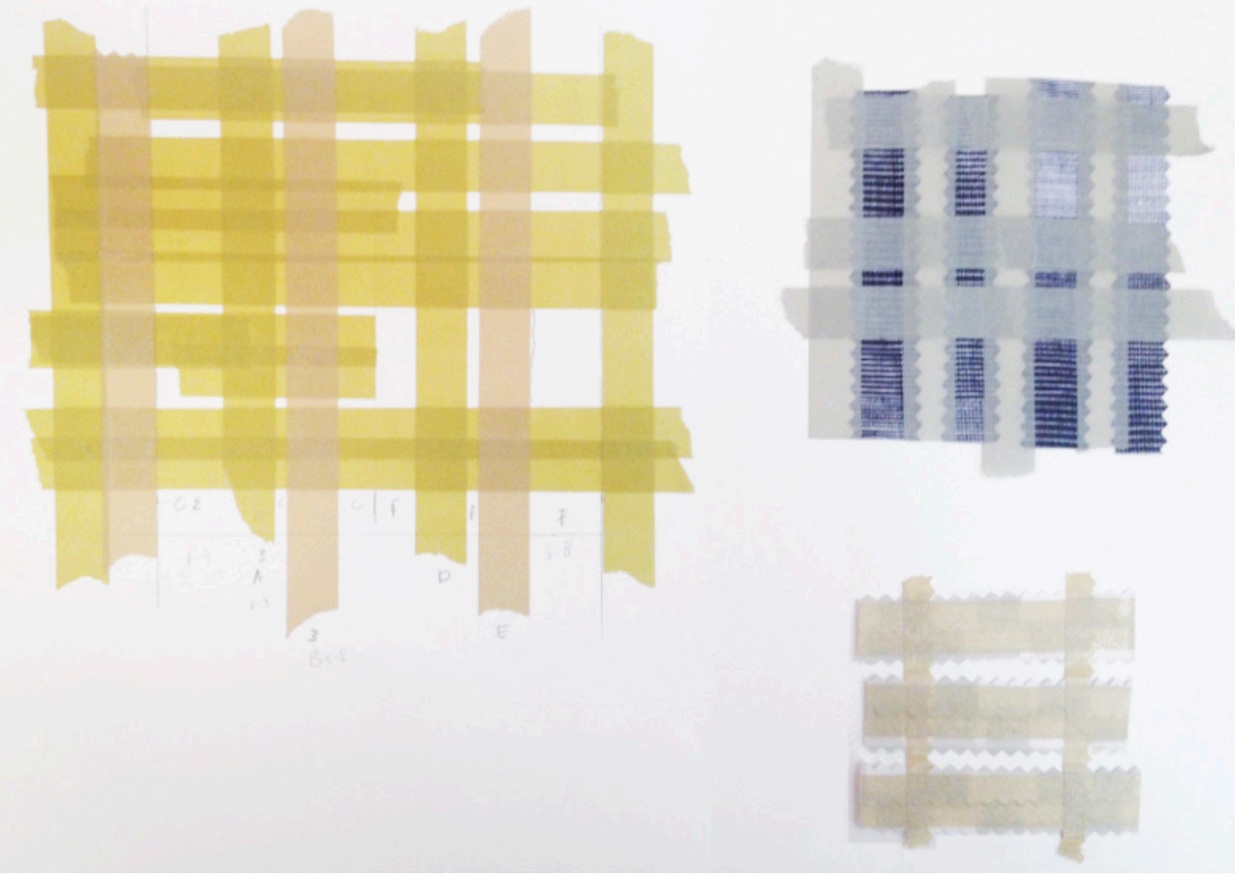
Inlay is made of 80% Cotton and 20% Nylon. Inlay is made as a seating and matting pillows. It was inspired by traditional dutch woven ribbon. Traditional dutch wear is layered with different patterned ribbons on top of each other. A closer look reveals a subtle plaid design.

“Bold and graphic in appearance, Inlay is constructed using an end-on-end nylon warp, creating a variety of micro-woven patterns and structures. Close inspection reveals a subtle plaid in the ground, upon which bands of unusual color appear overlaid. These gridded arrangements, highlighted by colored embellishments, seamlessly transition from one to the next. It is within these banded structures that detail and color reside, encouraging deep exploration within the design.”

This sample is a 10” x 10” sample and the repeat is 8” V, 27 1/4” H. The foreground of the design shows a bold graphic grid. Each bold line consists of smaller grid based patterns. The background reveals a subtle plaid design with two shades of a similar blue hue.

### USE

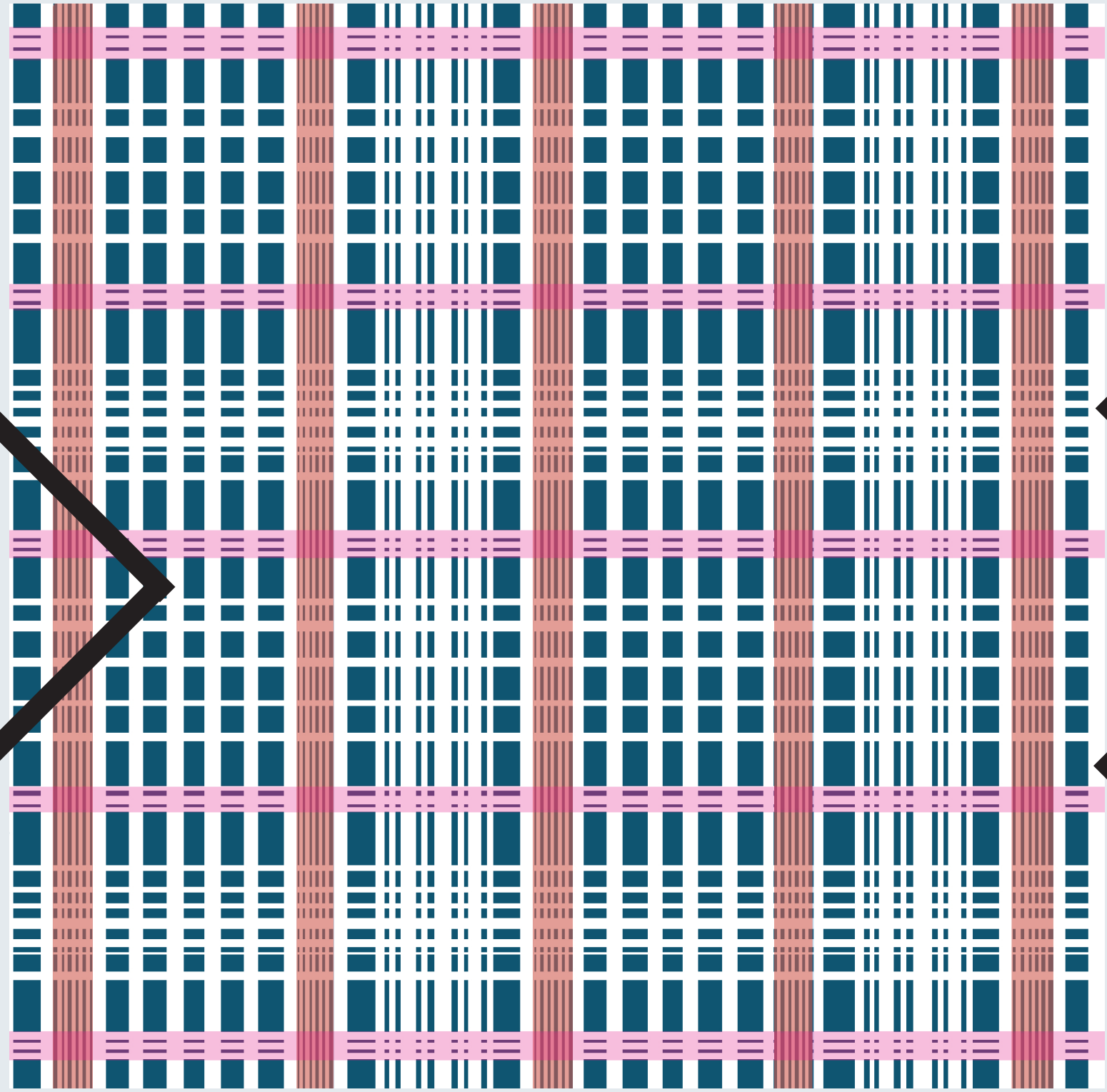
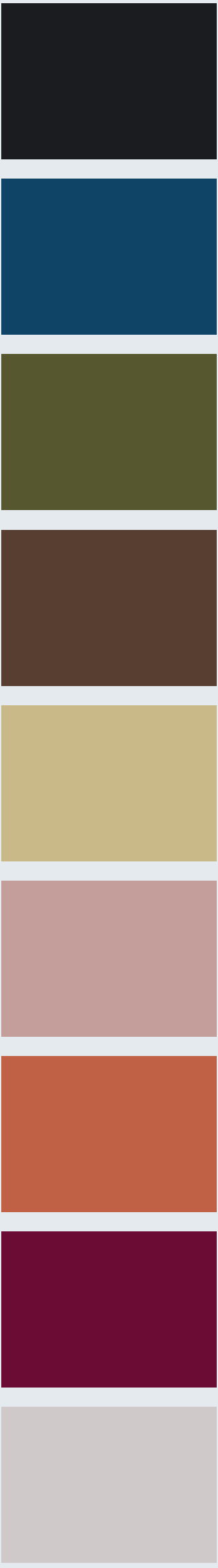
The pattern is used for a textile for seating furniture. The intended users of this pattern are those that will appreciate the detailed design and use of color.



(2016). Inlay. *Hella Jongerius*. Retrieved from <http://www.jongeriuslab.com/work/inlay1>

## JONGERIUS’ PROCESS WORK

## INLAY



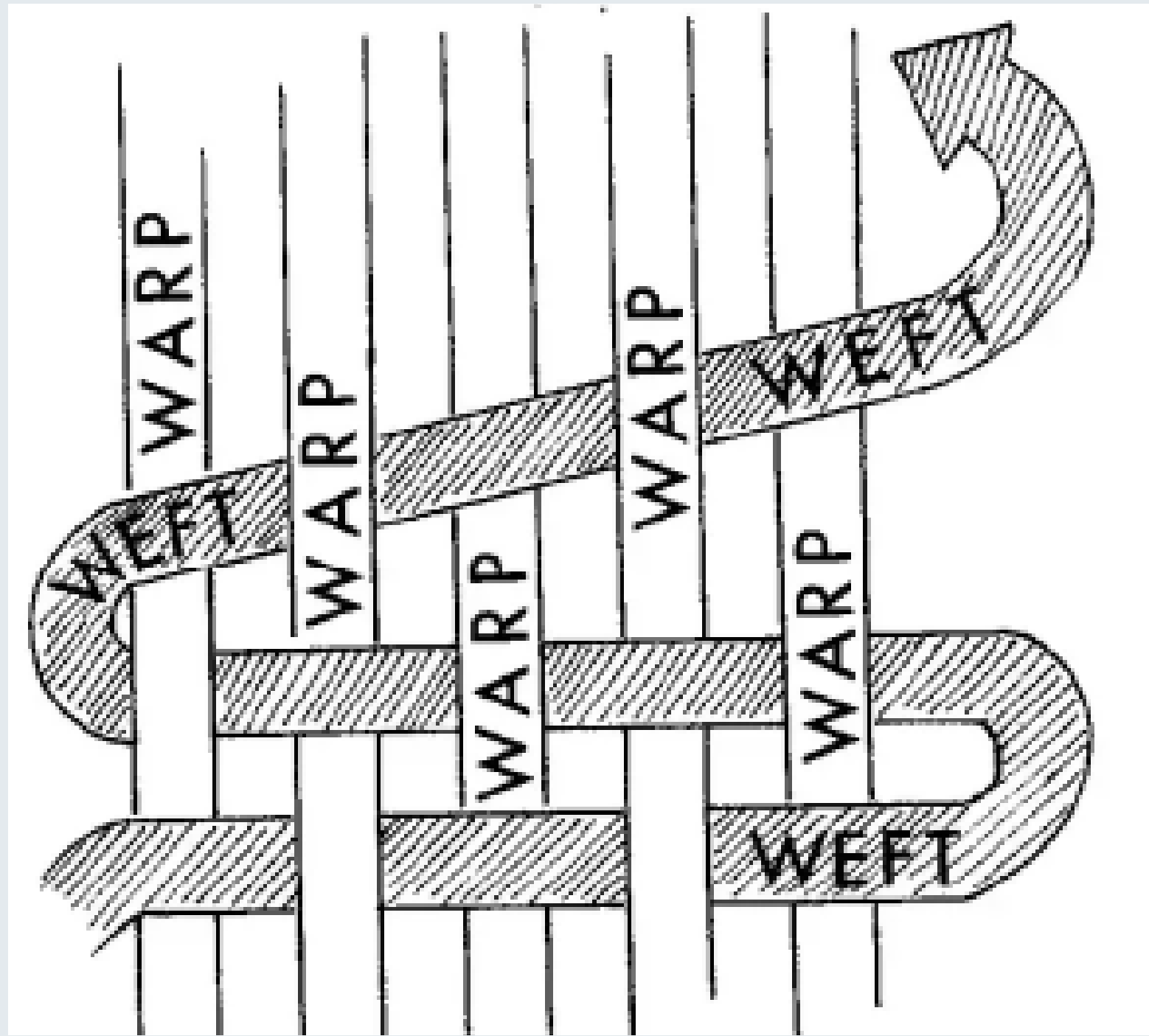
### BREAKDOWN SKETCH #1

#### COLOR

Hella Jongerius is known for using colors most wouldn’t put next to each other. She does this to surprise the eye and keep interest in the viewers. Her expert knowledge of color is shown here masterfully. Different colored cotton and nylon threads are woven together to create this pattern.



### BREAKDOWN SKETCH #2



### WARP AND WEFT SKETCH

### CRAFT

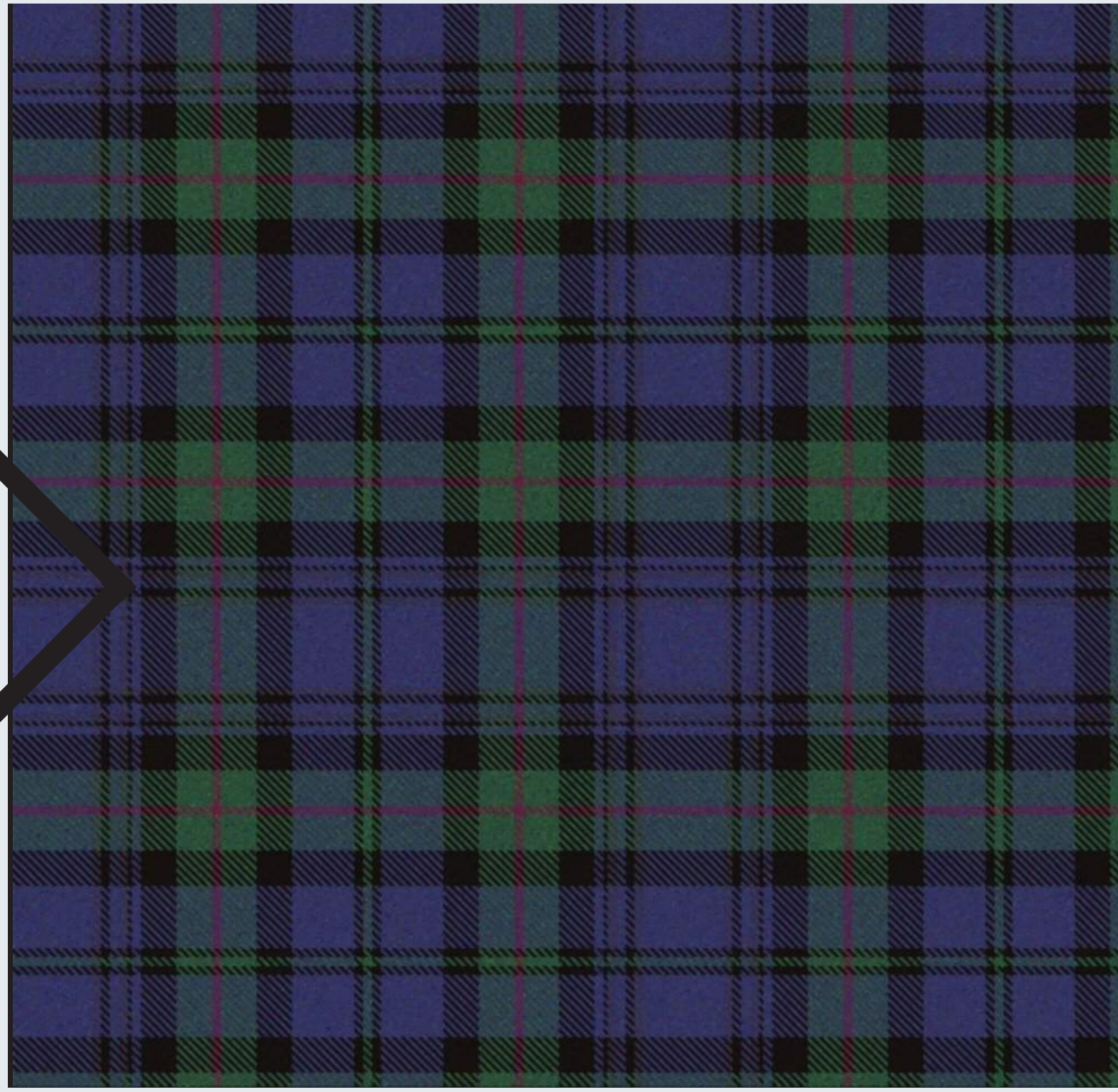
Inlay is constructed using an end-on-end nylon warp. This means that colored cotton thread is the warp and nylon is the vertical warp. A weaving machine is used for this process. Nylon is used as a polymer. The chemicals used to make nylon are amine, hexamethylene diamine, and adipic acid. The new amide molecules are held together by hydrogen atoms. Inlay is made of mostly cotton, using nylon for stretchability.

### HISTORY of COTTON

Cotton takes a long journey from seed to product. However, this process can be completed in less than a year. My fabric sample, Inlay, is produced by Maharam Fabrics. It is unclear where Maharam manufacturers get their cotton for their products, but Maharam is an American company. The United States is one of the highest cotton production countries in the world. Cotton is grown in all of the states in the bottom of the half of the U.S. geographically. Originally, in 3,000 BC cotton was being grown, spun and woven into cloth in the Indus River Valley in Pakistan and spread to Egypt’s Nile valley. In 800 AD, cotton cloth was brought to Europe. When America was discovered, cotton was found growing in the Bahamas (“The Story of Cotton”). Cotton seed was then planted all over the world including along the James River in Virginia. In 1793, Eli Whitney came up with a new ginning principle and constructed a gin that turned cotton ginning into a moneymaking enterprise. It also became much less labor intensive. A cotton gin is a mechanical device that removes the seeds from cotton.

### HOW COTTON is MADE

Farmers plant cottonseed in April and monitor the fields by taking out weeds, insects and any sign of disease because an entire crop can be destroyed by these things. A healthy plant flowers, turning yellow-white, then red, then dies, leaving a boll. When the boll bursts open it is dried up by the sun and gets harvested. “Mechanical picker spindles pick and twist the raw cotton fiber from the bur, and the raw fiber is captured in a basket on the back of the picker. Today’s pickers are armed with yield monitors and GPS to maximize efficiency”. Now the harvested cotton is converted into modules (tall rectangles of compressed cotton), which weighs around 20,000 pounds. The modules are then taken to the gin, which separates the lint from the seed. Grass and leaves are removed, and fine-toothed saws take out sticks. It is then crushed to extract the oil. The cotton lint is cleaned and enters a condenser that packs it into a 500-pound bale. Lastly, the bales are shipped to textile mills or manufacturers (“The Story of Cotton: How Cotton”, 2016).



### PRECEDENT PATTERN: TARTAN

#### CULTURE + HISTORY

There is no cultural or religious significance to Inlay, but it’s precedent pattern does. Inlay was not a direct result of the original tartan patter, but they have similar characteristics. Both are consisted of vertical and horizontal lines laid out with a grid. Tartan was first created with woven wool. It was weaved with different bands of colors, similar to the contemporary pattern. Many Scottish people wore this pattern for dress (seen below). Tartan also became regarded as Scottish family or clan emblems. Certain colors were used as identifying features of a clan or army in battle. Today, tartan is also created on non-woven materials like plastic.



Newsome, Matthew Allan C. (1994). “Introduction to Tartan”. Franklin, North Carolina: Scottish Tartans Museum. Archived from the original on 10 February 2006. Retrieved 31 May 2010.

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